

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

Claims 1 – 18 (Canceled)

19. (Currently Amended) A method of operating a router in a communication network comprising a plurality of routers, said router having a plurality of local non-broadcast multiple access interfaces to at least one connection-oriented non-broadcast multiple access network, said method comprising the steps of:

assigning a number to each of the local non-broadcast multiple access interfaces of said router wherein each of said assigned numbers is local to said router;

grouping the local non-broadcast multiple access interfaces of said router into connectivity classes using local connectivity information;

encoding information identifying the assigned numbers and the connectivity classes into a link state packet; and

transmitting the link state packet to at least one other router in the communication network.

20. (Previously Presented) The method of claim 19 wherein the link state packet is an OSPF link state advertisement.

21. (Previously Presented) The method of claim 19 wherein the information identifying the assigned numbers and the connectivity classes is encoded into opaque fields of the link state packet.

22. (Previously Presented) The method of claim 19 wherein the at least one connection-oriented non-broadcast multiple access network is an ATM network.